



## SUMMARY OF THE INVENTION

(MARKED VERSION)

### SUMMARY OF THE INVENTION

**[0001]** In view of the above-described circumstances, an object of the present invention is to provide a document processing apparatus and a recording medium which make it possible to easily form and maintain a home page (Web page data) expressed in two or more languages.

**[0002]** Another object of the present invention is to provide a document processing apparatus and a recording medium which make it possible to easily edit translated sentences obtained as a result of translation of a tagged document.

**[0003]** Still another object of the present invention is to provide a document processing apparatus and a recording medium which make it possible to selectively display original sentences in a tagged document and translated sentences obtained as a result of translation of the tagged document.

**[0004]** A further object of the present invention is to provide a document processing apparatus and a recording medium which make it possible to return the edited translation sentences of the result of translation into a tagged document and to use it.

**[0005]** A further object of the present invention is to provide a document processing apparatus and a recording medium which make it possible to easily edit original sentences in a tagged document to from a more favorable translation.

**[0006]** To achieve the above-described objects, according to one aspect of the present invention, there is provided a document processing apparatus comprising a language tag setting unit for setting a language tag designating a kind of language at each of constituent unit positions in an original and those in a translated version corresponding to the original, and a document forming unit for forming a tagged document including the original and the translated version each having the language tag set therein.

**[0007]** According to an aspect of the present invention, the~~The above-described document forming unit may form~~forms a tagged document in which the original and the translated version ~~each having~~have the language tag set therein ~~are described~~ in an original-versus-version form that is indicative of a correspondence between the original and the translated version.

**[0009]** ~~The According to an aspect of the present invention, the original may be contained in the processing-object tagged document is enabled to be edited.~~

**[0010]** ~~The above-described document processing apparatus further comprises a visibility control tag setting unit for setting a visibility control tag for controlling any document portion so that the document portion is invisible, the visibility control tag setting unit setting the visibility control tag at such a position that one of the original and the translated version is in an invisible state.~~

**[0011]** ~~The visibility control tag setting unit may set the visibility control tag at such a position that one of the original and the translated version is set in an invisible state and the language tag is also set in an invisible state.~~

**[0012]** ~~The above-described document processing apparatus further comprises a display processing unit for interpreting the tag contained in the tagged document and for enabling a browser for displaying the tagged document to display the formed tagged document on the basis of a result of the interpretation in the above document processing apparatus.~~

**[0013]** According to another aspect of the present invention, there is provided a document processing apparatus comprising a language tag setting unit for setting a language tag at each of constituent unit positions in a first text described in a first language and those in a second text described in a second language of the first text, and a document forming unit for forming a tagged document including the first text and the second text each having the language tag set therein.

**[0014]** ~~The above-described document forming unit may form a tagged document in which the first text and the corresponding second text each having the language tag set therein are described by being related to each other.~~

**[0015]** ~~The above-described document processing apparatus further comprises a visibility control tag setting unit for setting a visibility control tag for controlling a text so that the text is invisible, the visibility control tag setting unit setting the visibility control tag at such a position that one of the first text and the second text is in an invisible state.~~

**[0016]** ~~The visibility tag setting unit may set the visibility control tag at such a position that one of the first text and the second text is set in an invisible state and the language tag is also set in an invisible state.~~

**[0017]** ~~The above-described document processing apparatus further comprises a display processing unit for interpreting the tag contained in the tagged document and for enabling a browser for displaying the tagged document to display the formed tagged document on the basis of a result of the interpretation.~~

**[0018]** According to still another aspect of the present invention, there is provided a document processing apparatus comprising an analysis unit for determining and extracting an original text from a processing-object tagged document, and an editing unit for enabling edit processing of the original text extracted from the tagged document by displaying the original text.

**[0019]** ~~The analysis unit may determine the original text according to a language tag contained in the processing-object tagged document.~~

**[0020]** ~~The above-described document processing apparatus further comprises a translation processing unit for making a translated version by translating the original text edited by the editing unit.~~

**[0021]** ~~The above-described document processing apparatus further comprises a restoration unit for restoring, from the original text after the editing and the translated version made by the translation processing unit, a tagged document in the same format as the processing-object tagged document according to tags contained in the processing-object tagged document, the tags including the language tag.~~

**[0022]** According to yet another aspect of the present invention, there is provided a document processing apparatus comprising an analysis unit for determining an original text and a translated version corresponding to the original text in a processing-object tagged document, and an editing unit for enabling edit processing of the original text and the translated version by extracting the original text and the translated version from the tagged document and by displaying the original text and the translated version in an original-versus-version form.

**[0023]** ~~The analysis unit may determine the original text and the translated version according to language tags contained in the processing-object tagged document.~~

**[0024]** ~~The above-described document processing apparatus further comprises a translation processing unit for making a translated version by translating the original text edited by the editing unit.~~

**[0025]** ~~The above-described document processing apparatus further comprises a restoration unit for restoring, from the original text after the editing and the translated version made by the translation processing unit, a tagged document in the same format as the processing object tagged document according to tags contained in the processing object tagged document, the tags including the language tag.~~

**[0026]** According to a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a program recorded thereon, the program for enabling the computer to execute ~~a step of operations including~~: setting a language tag designating a kind of language at each of constituent unit positions in an original and those in a translated version corresponding to the original, and ~~a step of forming~~ a tagged document including the original and the translated version each having the language tag set therein.

**[0027]** ~~The program recorded on this recording medium may enable the computer to further execute a step of setting a visibility control tag for controlling any document portion so that the document portion is invisible, the visibility control tag being set at such a position that one of the original and the translated version is in an invisible state.~~

**[0028]** According to still a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a program recorded thereon, the program for enabling the computer to execute ~~a step of operations including~~: setting a language tag designating a kind of language at each of constituent unit positions in a first text described in a first language and those in a second text described in a second language of the first text, and ~~a step of forming~~ a tagged document including the first text and the second text each having the language tag set therein.

**[0029]** ~~The program recorded on this recording medium may enable the computer to further execute a step of setting a visibility control tag for controlling a text so that the document is invisible, the visibility control tag being set at such a position that one of the first text and the second text is in an invisible state.~~

**[0030]** According to still a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a program recorded thereon, the program for enabling the computer to execute ~~a step of operations including~~: determining and extracting an original text from a processing-object tagged document, and a

~~step of enabling editing of the text extracted from the tagged document by displaying the original text.~~

**[0031]** ~~The program recorded on this recording medium may enable the computer to further execute a step of making a translated version by translating the original text after editing of the original text, and a step of restoring, from the original text after the editing and the translated version made by the translation, a tagged document in the same format as the processing-object tagged document according to tags contained in the processing-object tagged document, the tags including a language tag designating a kind of language.~~

**[0032]** According to still a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a program recorded thereon, the program for enabling the computer to execute a step of operations including: determining an original text and a translated version corresponding to the original text in a processing-object tagged document, and a step of enabling editing of the original text and the translated version by extracting the original text and the translated version from the tagged document and by displaying the original text and the translated version in an original-versus-version form.

**[0033]** ~~The program recorded on this recording medium may enable the computer to further execute a step of forming a translated version by translating the original text after editing of the original text, and a step of restoring, from the original text after the editing and the translated version made by the translation, a tagged document in the same format as the processing-object tagged document according to tags contained in the processing-object tagged document, the tags including a language tag designating a kind of language.~~

**[0034]** According to still a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a tagged document recorded thereon, the recorded tagged document comprising a first language tag designating a first kind of language; a first text following the first language tag, the first text being described in a first language; a second language tag following the first text, the second language tag designating a second kind of language; and a second text following the second language tag, the second text being described in a second language and corresponding to the first text.

**[0035]** According to still a further aspect of the present invention, there is provided a recording medium readable by a computer, the recording medium having a tagged document recorded thereon, the recorded tagged document comprising an invisibility start tag for setting a

following text in an invisible state; a first language tag following the invisibility start tag, the first language tag designating a first kind of language; a first text following the first language tag, the first text being described in a first language; a second language tag following the first text, the second language tag designating a second kind of language; an invisibility end tag following the second language tag, the invisibility end tag canceling the invisible state; and a second text following the invisibility end tag, the second text being described in a second language and corresponding to the first text.

**[0036]** According to a further aspect of the present invention, there is provided a document processing method comprising a step of setting a language tag designating a kind of language at each of constituent unit positions in an original and those in a translated version corresponding to the original; and a step of forming a tagged document including the original and the translated version each having the language tag set therein.

**[0037]** The above-described document processing method further comprises a step of setting a visibility control tag for controlling any document portion so that the document portion is invisible, said visibility control tag being set at such a position that one of the original and the translated version is in an invisible state.

**[0038]** According to still a further aspect of the present invention, there is provided a document processing method comprising a step of setting a language tag designating a kind of language at each of constituent unit positions in a first text described in a first language and those in a second text described in a second language of the first text; and a step of forming a tagged document including the first text and the second text each having the language tag set therein.

**[0039]** The above-described document processing method further comprises a step of setting a visibility control tag for controlling a text so that the document is invisible, said visibility control tag being set at such a position that one of the first text and the second text is in an invisible state.

**[0040]** According to still a further aspect of the present invention, there is provided a document processing method comprising a step of including: determining and extracting an original text from a processing-object tagged document; and a step of enabling editing of the original text extracted from the tagged document by displaying the original text.

**[0041]** The above-described document processing method further comprises a step of making a translated version by translating the original text after editing of the original text; and a step of

~~restoring, from the original text after the edit processing and the translated version formed by said translation, a tagged document in the same format as the processing-object tagged document according to tags contained in the processing-object tagged document, said tags including a language tag designating a kind of language.~~

**[0042]** According to still a further aspect of the present invention, there is provided a document processing method ~~comprising a step of including~~: determining an original text and a translated version corresponding to the original text in a processing-object tagged document; and a step of enabling edit processing of the original text and the translated version by extracting the original text and the translated version from the tagged document and by displaying the original text and the translated version in an original-versus-version form.

**[0043]** ~~The above-described document processing method further comprises a step of forming a translated version by translating the original text after editing of the original text; and a step of restoring, from the original text after the edit processing and the translated version made by said translation, a tagged document in the same format as the processing-object tagged document, according to tags contained in the processing-object tagged document, said tags including a language tag designating a kind of language.~~

**[0044]** According to the present invention, it is not necessary to form and manage a file with respect to each of a plurality of languages, so that the maintenance can be easily carried out.

**[0045]** According to the present invention, an original text and a translated version of the original text obtained by translation are displayed in an original-versus-version form such that edit processing and version can be easily carried out.

**[0046]** According to the present invention, an original text in a tagged document and a translated version of the original text obtained by translation can be selectively displayed.

**[0047]** Further, according to the present invention, an edited translated version of the result of translation can be reformatted to the tagged document and used.

**[0048]** Further, according to the present invention, an original text in a tagged document can be easily edited to obtain a more favorable translated version.